PATENT

DOCKET NO.: MSFT-2732/305554.01

Application No.: 10/782,988

Office Action Dated: August 22, 2006

REMARKS

Claims 1-28 are pending in this application. Claims 1-28 have been rejected. Claim 22 has been canceled for the sole purpose of expediting prosecution of the present application. Claims 1-4, 7, 9-17, 19-21, and 23-28 have been amended. No new matter has been added.

The drawings were objected to because they include reference characters (Figure 1, item 36', and Figure 2, item 200) not mentioned in the description. It is respectfully submitted that there is no item 36' in Figure 1 (item 36 is described in the application at paragraph [0016]), and that item 200 is described in the application at paragraph [0022]. Withdrawal of the objection to the drawings is respectfully requested.

Claims 1-4, 7, 9-14, 17, 19-24, and 27 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the terms "durable read" and "lazy commit" were held to be relative terms which render the claims indefinite. The claims have been appropriately amended. As noted above, claim 22 has been canceled, thereby obviating its rejection. Withdrawal of the rejection of claims 1-4, 7, 9-14, 17, 19-21, 23, 24, and 27 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

Claims 1, 5, 6, 11, 15, 16, 21, 25, and 26 have been rejected under 35 U.S.C. § 101. In particular, claims 1, 11, and 21 were held to be inoperative and therefore lacking utility, and claims 5, 6, 15, 16, 25, and 26 were held to be directed to non-statutory subject matter. The claims have been appropriately amended. Withdrawal of the § 101 rejection of claims 1, 5, 6, 11, 15, 16, 21, 25, and 26 is respectfully requested.

Claims 1-28 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Lomet (U.S. Patent No. 5,933,838). As noted above, claim 22 has been canceled, thereby obviating its rejection. It is respectfully submitted that claims 1-21 and 23-28 are patentable for the reasons set forth below.

Claim 1 has been amended and includes the features of making a change to a data page and then marking a durability indicator associated with the data page that changed. The durability indicator indicates that the changed data page has yet to be written to a persistent data store. Data associated with the change is stored in a transaction log buffer. The



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transaction log buffer is flushed to the persistent data store based on the durability indicator, before the changed data page is read. (see application, as originally filed, at paragraphs [0033] – [0034], for example). The prior art fails to disclose or suggest such features.

Lomet describes recovery techniques for databases that allow applications to persist across a crash. Lomet provides "a dirty flag field 135, 136 which holds a flag bit indicating whether or not the object has been modified in volatile cache without those modifications being flushed to stable memory" (column 18, lines 54-56). Lomet provides the dirty flag field in the context of dependencies, where one object must be flushed prior to another object being flushed in order to avoid losing data during a recovery. Lomet however, does not store data associated with a data page change to a transaction log buffer, or flush the transaction log buffer to a persistent data store before the changed data page is read, based on the indicator.

Claims 11 and 21 recite similar features to those described with claim 1. Therefore, claims 1, 11, and 21, and their dependent claims, are patentable for the same reasons. Withdrawal of the rejection of claims 1-21 and 23-28 under 35 U.S.C. § 102(b) is respectfully requested.

In view of the above amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested.

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